

phrin. Gave another dose of epinephrin alone, in about twenty minutes, with complete relief of dyspnea. The tremor followed but was, I think, not so severe. This symptom has been constant with this patient and also with the second. In the second case it did not seem so severe but was more prolonged. An hour after one treatment he told me that he wanted to write a check but did not, because he was sure that, at the bank, they would think he was drunk.

Sajous gives this, among others, as one of the symptoms of adrenal over-activity, and possibly in these cases it indicated an unnecessarily large dose. Hoping possibly to ward off future attacks, gave patient No. 1 suprarenal extract in 5 gr. capsules, one three times a day, but she was unable to take one a day on account of disturbance of the stomach. Ten days later was called in the night. Usual symptoms. Hypodermic injection of 1 to 1000 solution, ten minims. Relief in two and one-half minutes. Patient was now going to the country, so I gave her a bottle of epinephrin solution to be taken during attacks, twenty drops every one-half hour. She reported "no effect whatever."

When free from symptoms, I think in May, I had Dr. Fred Baker examine her. He demonstrated that pressure high up on the left lateral band would start asthmatic breathing. Advised systematic application of 20 per cent chromic acid solution. Owing to patient being in the country, I was never able to carry out this suggestion. She came in two or three times, during May and June, suffering from attacks which were invariably relieved by epinephrin (hypodermically). In the meantime, she had developed a fistula in ano. Her people were not willing to have an operation here, so she returned to Michigan. I wrote her physician of my experience with her and particularly urged treatment of lateral band. Received a letter from her recently, saying that at the same time she was operated upon for fistula, the galvano cautery was used on her throat. Was feeling fine; free from hay fever, etc. But of course it is too soon to judge of results.

Case 2—Male, age 53; druggist. First noticed symptoms resembling hay fever at about 38 years of age. Would develop after handling morphia and scale pepsin. Was much run down at the time. After a few months, and an outing, he recovered and was not bothered for some years. Symptoms returned about seven years ago and gradually became more asthmatic in character. Various things in the prescription counter would bring on an attack. Once had an attack while at Lake Tahoe from taking a mixture for diarrhea, containing a small amount of laudanum. Gave up business two years ago. When I have seen him there has seemed to be but little spasm of the bronchi, but more of a general edema of the bronchial mucous membrane. Have used epinephrin four times. Relief is prompt and lasting, but not quite so rapid as in first case.

The injections are less painful when the solution epinephrin is diluted with equal parts of normal salt solution. The aching and soreness following are perhaps more lasting than after morphin injections.

It is only fair to say that P. D. & Co., in a brochure on the subject, note that gangrene and subsequent sloughing have followed the hypodermic use of solutions even much more dilute than 1 to 2000. Before seeing this (and since), I have frequently used the 1 to 1000 solution in fifteen minim doses, and have seen no bad results. To watch the local effect, I took in my own arm, a few days ago, ten drops each of epinephrin and normal salt solution.

The following were notes made: 9:57 A. M., injection over insertion of deltoid. Not painful. 9:58½ A. M., blanched skin size of a nickel; cutis ansera very marked. 10 A. M., blanched spot size of half dollar, surrounded by pink aureola. Tendency to fibrillary tremor; decided ache; greater fullness of pulse, no effect on rate. 10:10 A. M., whitened area size of a dollar; aureola more marked. Ache extends in course of ulnar nerve; noticeable down to little finger. Slight ache and some soreness most of the day. Nothing to be seen at bedtime.

My belief is that where there has been sloughing, the epinephrin has been injected into the skin itself, and that when put into looser tissue no such results will follow. When I first used epinephrin for asthma, I was not aware that its use, hypodermically, for this disease had been reported. I have since noticed a series of five cases reported by Drs. Bullowe and Kaplan of N. Y. antedating mine, and there may have been others. Their report was favorable in each case.

REPORT OF A CASE OF PERNICIOUS ANEMIA.*

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THE following case is of interest, because of its resemblance to uncinariasis, which I at first thought it was:

Mr. X, age 55. Family history unobtainable. Previous history negative. His occupation is that of superintendent of mines, which necessitates him visiting various small mines and camps in Mexico, where the food is poor and the drinking water is obtained from ditches and stagnant pools. He has always been healthy and robust, until his present illness began, which was in March, 1903. At that time he developed a persistent diarrhea, which lasted two months. A distinct palor developed at the same time, which still persists. He also complained of a general weakness and lassitude. He has occasional fainting spells. The appetite also is fickle.

Status praesens (January 1, 1904).—Patient fairly well nourished, of a waxy, anemic appearance, no color in lips or mucous membranes. Abdomen rather prominent, but soft and easily palpable. Eyes negative. Lungs negative. Heart has a systolic murmur probably of hemic origin. Abdomen prominent, no tumor palpable. Rectum negative, no hemorrhoids. Urine, twenty-four hour specimen, 1400 c. c., S. G. 1018; no albumen or sugar; few hyaline casts.

His temperature is irregular, varying from normal to 100 F. Uncinariasis or "miners' anemia" was first thought of, for several reasons, on account of his occupation and mode of life, his waxy, anemic appearance, prominent abdomen; also because he always felt better after free purgation. Therefore, I first examined his stools, after giving him four grammes of thymol in capsules, in two doses, two hours apart on an empty stomach. This was followed in two hours by 45 c. c. of castor oil, given in beer foam to disguise the taste. The stools were then saved and examined as follows: 10 c. c. of feces were well shaken with 90 c. c. of water, and then allowed to settle for two hours. The sediment was then examined for eggs repeatedly, but none were found. Worms also were absent.

A blood examination was next made, which was as follows: Reds, 1,200,000; hemoglobin, 30%; color index, 1.2; marked poikilocytosis; few nucleated reds (gigantoblasts). This of course settled the diagnosis. The patient was put on an intestinal antiseptic with increasing doses of arsenic. He then returned to his home in Mexico. His family physician wrote (April, 1904) that the attacks of dizziness and fainting continued to grow worse, so that it was impossible for him to even sit up in bed. His mind also was no longer clear. His death occurred in the early part of May. No post mortem was obtainable.

Stiles in a report on the prevalence and geographical distribution of hook worm disease, shows the wide distribution, especially through the South, in the sandy regions, in people who are careless in their habits and mode of living. The lesions produced by the hook worm occur in the small intestine a few meters from the stomach. The anemia is due to the hemorrhage, through the wounds made by the parasite; also to the blood which it sucks. There is also a toxin developed by the worm itself. The anemia is more or less severe, according to the number of worms in the intestine and the length of their existence there. The longest period of time which the disease has existed without re-infection, of which Stiles has any accurate record, is 6 years and 7 months. The disease has existed for fifteen years in certain subjects, but they were living under poor hygienic conditions, so that they were probably re-infected. The eggs of the female do not develop in the human intestine, but require an intermediary host, so that unless the patient is reinfected, the worms must eventually die out. The intermediary host is probably the earth. Ordinary earth worms are thought by some to act as host. The eggs are oval in shape, .05 m.m. long, and have a thin transparent shell. The male worm is from 6 to 10 m.m. long, the female being a little larger, from 5 to 18.

The symptoms are more or less severe, according to the length of the time the disease has existed, and the number of worms present. The patient complains of gastro-intestinal disturbances, colicky pains, dyspnea and later on, edema, with the general appearance of a more or less profound anemia. The repeated examination (microscopic) of the stools, for the worms or eggs, especially after the adminis-

*Read before the El Paso County (Texas) Medical Society. Blood specimens were also shown.

tration of thymol and epsom salts, is the only way to clear up the diagnosis. Where an anemia exists for any length of time, in a sandy or even a malarial country, especially in people of careless habits, the stools should be carefully examined for the anchylostomata, or their eggs.

A blood examination is the only reliable means of making a positive diagnosis in early cases of pernicious anemia. This patient had passed through the hands of several competent men in the East, who had made a diagnosis of a simple anemia, and put the patient on an iron preparation, with a favorable prognosis, though without any improvement in the patient. A low red count, the presence of large nucleated reds with a relative increase in the hemaglobin, is almost diagnostic of pernicious anemia—where no intestinal parasites are present. Poikilocytosis may be found in a simple anemia. In chlorosis the percentage of hemaglobin is either diminished or stationary.

In preparing blood smears for microscopic examination, it is necessary to have cover glasses, which have been cleaned with alcohol and an absolutely clean old linen cloth or handkerchief. The fingers should not touch the cover slips after they are once cleaned. The blood will not spread evenly on a dirty slip. Then, too, a dirty cover slip may cause some post mortem changes in the blood. The end of the little finger or lobe of the ear is then cleaned, and a deep stab made with a cutting needle, to insure plenty of blood. The first few drops of blood are wiped away, then touch the next drop lightly with the cover slip, so as to get a very small drop of blood. Then place another cover slip over the first, and slide them apart on a horizontal plane, and allow them to dry in the air, then fix by heat at 110° c. for two minutes, or in equal parts of ether and absolute alcohol for an hour. Then stain with Erlich's tripple stain for about seven minutes, or Simons' Eosinate of Methybenzene. The specimen may then be mounted in Canada balsam and examined under an oil immersion lens.

The prognosis in pernicious anemia is bad. Some cases have apparently recovered under arsenic. These patients have relapses, however, so a guarded prognosis should be given.

Condemnation of the Division of Fees.

At a recent meeting of the Council of the Chicago Medical Society, Dr. Arthur Dean Bevan offered the following resolution which is to be voted on at a subsequent meeting and then, if adopted, to be incorporated as an amendment to the Constitution: "Any member who is guilty of giving or receiving a commission, or of entering into any arrangement for the division of a fee for professional services, which arrangement is not known and fully understood by the patient or party by whom such fee is paid, shall be guilty of unprofessional conduct."—*Medical Record*.

Nurses' Journal.

The California State Nurses' Association has undertaken the regular quarterly publication of a journal with the title "*The Nurses' Journal of the Pacific Coast*," and the first number has recently been received. It is certainly a most creditable production. It is a thoroughly businesslike publication, properly gotten up, well printed on good paper, and in every point of mechanical construction, most praiseworthy. The reading matter contained is also excellent, and the officers of the Association are to be highly complimented on their work. This number contains the following papers: History of the Association; St. Dorothy's Rest; A Talk with Nurses in Private Practice; An Australian Nurse in America; State Registration; Visiting Nurses in San Francisco; Emergency Hospital in a Large Department Store; Scientific Study for Nurses; The Pioneer Nurse. It also contains a list of the members of the Association.

A Manufacturer's Troubles.

Among the alleged infringers upon whom Parke, Davis & Co. have served notices for the purpose of protecting their patent rights in Adrenalin are Armour & Co., manufacturers of Suprarenalin; Eli Lilly & Co., makers of Sanguestin; H. K. Mulford & Co., manufacturers of Adrin; Frederick Stearns & Co., manufacturers of Adnephrin; Henry K. Wampole & Co., manufacturers of Hemostatin, and John Wyeth & Bro., manufacturers of Catrenalin. In this connection the Tribunal of Commerce, Brussels, Belgium, has rendered a decision in favor of the defendants in the case of Comar & Cie vs. Parke, Davis & Co., of Detroit. The suit was brought by the plaintiffs to obtain a judgment, stating that the name "Adrenalin" was not the lawful copyright of the defendants, Parke, Davis & Co. The most important of the claims set up by the plaintiffs were that the word "Adrenalin" was a descriptive word; that the inventors had allowed their rights to lapse, and that the plaintiffs had deposited the word "Adrenalin" as a trade mark at the International Bureau at Berne before the defendants. The court held, however, that none of these contentions was valid and gave judgment in favor of Parke, Davis & Co., the plaintiffs, Comar & Cie paying all the costs.—*Am. Med. Journalist*.

California Medical and Surgical Reporter.

A new medical journal has been born in the southland and to it has been given the name above. Los Angeles certainly must be a very live and lively city, for this is the fourth medical journal to be issued from the metropolis of the south. Dr. Charles F. Wagar is the editor in chief and he seems to have secured for associates or assistants some 39 physicians of Southern California. We would not be considered as small-minded or hypercritical, but, on the face of it, it is a trifle difficult to see just wherein is the paramount necessity for another medical journal, either here or anywhere else, for the matter of that. The principal trouble with the host of privately owned medical journals is that they must make money to live, and that the money must come from advertisers. There are no rules and no scruples to hold them back, and so the chionias and the sengs, the antikamnas and the antiphlogistines, the sanmettos and the tongalines, are enabled to keep on presenting themselves to the gullible physician, who is naturally a credulous, guileless and trusting man and believes too much that is printed and paid for.

The Secret Disclosed.

It is announced that "Health Hints for the Household," that now almost historic document, "issued by the Board of Health of San Francisco for the purpose of furnishing medical information, briefly, in regard to the care in the families of contagious, communicable and infectious diseases," was written by no less a person than Dr. D. F. Ragan. In a way, this is surprising, for if memory serves, Dr. Ragan was once connected—nay, even intimately connected, with the School Board of San Francisco, and consequently one would hardly look for such grotesque and anomalous forms of the poor English language, in a document written by a former school official.

Shall I Operate?

Billroth, in writing to a Russian surgeon regarding the fatal malady of Pirogoff, a palatal neoplasm, refused to operate or to advise an operation, saying:

"I am not that bold operator whom you knew years ago in Zürich. Before deciding on the necessity for an operation I always propose to myself this question: 'Would you permit such an operation as you intend performing on your patient to be done on yourself?' Years and experience bring in their train a certain degree of hesitancy (Zurückhaltung)."—Dr. C. A. Powers, Address, A. M. A.